

Forest Health Protection Pacific Southwest Region



Date: March 18, 2019 File Code: 3400

To: Patricia Grantham, Forest Supervisor, Klamath National Forest

Subject: Pine Away Insect and Disease C.E. Project

At the request of Todd Drake (Forester) a site visit was made to an area initially identified as Pine Away project area on November 8, 2018. The objectives were to assess the current insect and disease conditions and discuss suitability for using the Farm Bill Insect and Disease CE.

Background

The site visit was originally proposed with an attached set of screenshots from Google Earth of a plantation that was experiencing a wave of mortality (Figure 1). The site was at the end of a decommissioned spur road with easy access via a short hike where the road was blocked. Upon arriving at the unit, it was determined that the mortality was in a very



Figures 1. Time progression using Google Earth – 2014 [pre-fire], 2015, 2016, 2017 – of mortality occurring in the Walker Ridge area of the Happy Camp Complex ca.2014.

NORTHERN CALIFORNIA SHARED SERVICE AREA 3644 AVTECH PARKWAY, REDDING, CA 96002 (530) 226-2437 dense ponderosa pine plantation with average diameters over 20 inches at breast height. Due to the uncharacteristic wave of western pine beetle-caused mortality seen in this plantation the Pine Away Project originated. The Pine Away Project area covers approximately 3,000 acres within the Walker Creek drainage between Walker Ridge and Slinkard Ridge approximately 5 miles south of the community of Seiad. N41.75635, W123.177.

Observations

The plantation at the beginning of this project is within the perimeter of the Happy Camp Complex, a wildfire that burned 134,056 acres in August through October, 2014. There are many patches of ongoing mortality in the ponderosa pine caused by western pine beetle along Walker Ridge and throughout the happy Camp Complex footprint (Figure 2). The stand we visited, the one shown in the e-mail with the Google Earth screen shots, is a dense ponderosa pine plantation with current BA between 270-330 square feet per acre and diameters averaging near 23 inches at breast height (Figure 3). All attacked trees have been fire-injured as seen by the bole scorch (Figure 4).

Figure 2. Patches of tree mortality as seen from the forest road going through the Happy Camp Complex of 2014.





Figure 4. Western pine beetle galleries under bark of recently killed ponderosa pine with fire injury.

Figure 3. Dense ponderosa pine plantation with fire injuries from 2014 Happy Camp Complex.

Discussion

Discussions centered on suitability of using the 2014 Farm Bill Insect and Disease C.E. to treat as many acres as possible due to the high volume at elevated risk of mortality due to western pine beetle. Although it is expected that there may be elevated levels of western pine beetle-caused tree mortality in ponderosa pine plantations injured by wildfire, the density of the stand and size of trees affected provides concern that the mortality may be much more than expected and the loss of the plantation as a Forest investment. Todd would like to see the BA decreased to about 80 which would decrease risk of bark beetle infestation in the pines that are being favored. The increase in mortality has been noted in the 2017 aerial survey. Walker Creek is a designated watershed for Farm Bill use and the area is within Tier 2 High hazard area. I would support thinning this area as part of a Farm Bill Insect and Disease C.E. project.

If you have any questions regarding this report and/or need additional information, please contact Cynthia Snyder at 530-226-2437.

/s/ Cynthia Snyder

CC: Todd Drake, Ben Haupt, Andrew Mueller, Chris Losi, Sheri Smith, Phil Cannon, Sherry Hazlehurst, Chris Fischer